

BASEBAND PROCESSING METHOD BASED ON SMART ANTENNA AND INTERFERENCE CANCELLATION

Abstract

This invention discloses a baseband processing method based on smart antenna and interference cancellation. The method includes the steps of: A. making a channel estimation to get a channel response; B. picking up useful symbolic level signals from received digital signals by smart antenna beam forming based on the channel estimation of step A; C. reconstructing the useful symbolic level signals and adding a scrambling code to get the chip level reconstructed signal; D. subtracting the reconstructed signal from the received digital signal; and E. executing steps B to D repeatedly to recover signals for all users. The method of the invention can solve problems associated with interference of multi-path propagation in CDMA systems with smart antennas with better results.

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